

Appl. No. 09/813,974
Amdt. dated Jan. 27, 2005

Reply to Office Action of September 27, 2004

Amendments to the Specification

Please **replace** the Abstract with the following:

A method for transmitting data through an analogue channel [(4)] from an analogue modem [(2)] to a digital modem (3) ~~comprises~~ includes encoding data inputted to the analogue modem [(2)]. An encoder [(6)] encodes data inputted into the analogue modem [(2)] into corresponding constellation points [(9)] of a one-dimensional constellation [(8)]. During initial handshaking a microprocessor [(12)] in the digital modem [(3)] computes the constellation points [(9)] of the constellation [(8)] so that mid points [(15)] between adjacent constellation points [(9)] coincide with mid points [(14)] between adjacent codec levels [(10)]. The computed constellation points [(9)] of the constellation [(8)] are transmitted along with the value of the largest constellation point [(9)] and its corresponding codec level [(10)] to the analogue modem [(2)]. By selecting the mid points [(15)] between the constellation points [(9)] to correspond with mid points [(14)] between adjacent codec levels [(10)] the noise margin is significantly enhanced.

~~Figs. 1 and 3 to accompany the abstract.~~